

DENTAL SCIENCE I – Benchmark 1

INTRODUCTION TO DENTISTRY

STANDARD 1: Overview of Dentistry

Students will examine the field of dentistry.

OBJECTIVES:

- 01.01 Identify key events and people in the history of dentistry and discuss their contributions.
- 01.02 Describe the characteristics of a professional dental assistant.
- 01.03 Discuss the education, licensure and job descriptions and professional associations (with acronyms) for the dental health care team including; dentist, hygienist, chairside assistant and dental laboratory technician.
- 01.04 Describe the areas of specialization in dentistry.

STANDARD 2: Dental Instruments

Students will identify instruments, dental handpieces and accessories utilized in general dentistry.

OBJECTIVES:

- 02.01 Identify the components and classification of dental instruments including accessory items.
- 02.02 Identify the components and uses of dental handpieces and rotary cutting instruments.
- 02.03 Identify examination instruments.
- 02.04 Identify hand cutting instruments.
- 02.05 Identify restorative instruments.
- 02.06 Identify accessory instruments.
- 02.07 Identify and attach dental handpieces.
- 02.08 Identify and attach burs for rotary cutting instruments.

STANDARD 3: The Dental Office

Students will identify components, qualities, equipment, team positioning, and principles of ergonomics in the dental office.

OBJECTIVES:

- 03.01 Identify the major areas of the dental office; identify clinical equipment, indicate the use and maintenance of each.
- 03.02 Identify the principles of team positioning including ergonomics and operating zones.
- 03.03 Identify the isolation techniques used to control moisture during dental procedures.
- 03.04 Perform appropriate morning and evening routine.
- 03.05 Admit, seat, and dismiss the patient.
- 03.06 Demonstrate correct principles of team positioning.
- 03.07 Use the dental mirror and instrument intraorally.
- 03.08 Transfer instruments using single handed technique.
- 03.09 Transfer instruments using two-handed technique.
- 03.10 Perform moisture control.
- 03.11 Perform mouth rinse.
- 03.12 Identify three categories of risk factors that contribute to increased risks for injury.
- 03.13 Demonstrate the neutral working position and exercises that can strengthen muscles and reduce fatigue.

INFECTION CONTROL

STANDARD 4: Disease Transmission

Students will examine the causes of disease and demonstrate techniques to prevent the transmission of disease in the dental setting.

OBJECTIVES:

- 04.01 Identify the major groups of microorganisms.
- 04.02 Analyze the components of the chain of infection.
- 04.03 Describe diseases and modes of transmission.
- 04.04 Describe infection control measures to limit disease transmission in the dental office.
- 04.05 **Handwash before gloving.**
- 04.06 **Demonstrate the use of PPE.**

STANDARD 5: Sterilization Techniques

Students will implement principles and techniques of instrument processing, disinfecting a dental treatment area, including pre-cleaning and barriers.

OBJECTIVES:

- 05.01 Compare contaminated and clean areas; indicate the equipment located on each.
- 05.02 Identify differences between cleaning, disinfecting, and sterilization. Also identify the products used for each of them.
- 05.03 **Perform treatment room preparation, cleaning and disinfection.**
- 05.04 **Clean the evacuation system.**
- 05.05 **Operate the ultrasonic cleaner.**
- 05.06 **Autoclave instruments.**
- 05.07 **Sterilize instruments with chemical liquid.**
- 05.08 **Sterilize the dental handpiece.**

STANDARD 6: Occupational Health and Safety

Students will interpret OSHA regulations and comply with their standards to ensure a safe work environment.

OBJECTIVES:

- 06.01 Explain the regulatory and advisory agencies of the healthcare field.
- 06.02 Describe the components of an OSHA Exposure Control Program including bloodborne pathogens, infection control practices, and waste management.
- 06.03 Discuss OSHA policies of safe work practices including the Hazards Communication Program.
- 06.04 List factors in bacterial contamination of dental unit water lines and methods to reduce contamination.
- 06.05 **Use MSDS to create an appropriate label for a secondary container.**
- 06.06 **Clean up a spill of potentially infectious material.**
- 06.07 **First aid after an exposure incident.**
- 06.08 **Hepatitis B vaccination.**